

65. (Amended) The carbon foam of claim 58 wherein the foam provides a bulk thermal conductivity from about 58 W/m·K to about 106 W/m·K.

(4) 66. (Amended) The carbon foam of claim 65 characterized by an X-ray diffraction pattern exhibiting relatively sharp doublet peaks at 2 θ angles between 40 and 50 degrees.

(5) 69. (Amended) The carbon foam of claim 56 wherein the foam provides a specific thermal conductivity greater than about 109 W·cm³/m·K·g.

71. (Amended) The carbon foam of claim 69 characterized by an X-ray diffraction pattern having an average d002 spacing of about 0.336 and exhibiting relatively sharp doublet peaks at 2 θ angles between 40 and 50 degrees.

(6) 72. (Amended) The carbon foam of claim 56 wherein the foam provides a specific thermal conductivity from about 109 W·cm³/m·K·g to about 200 W·cm³/m·K·g.

(7) 76. (Amended) The carbon foam of claim 56 wherein the foam provides a specific thermal conductivity greater than copper.

(8) 78. (Amended) The carbon foam of claim 77 characterized by an X-ray diffraction pattern exhibiting relatively sharp doublet peaks at 2 θ angles between 40 and 50 degrees.

(9) 80. (Amended) The carbon foam of claim 56 wherein the foam provides a specific thermal conductivity greater than four times that of copper.